

In the Drawings:

Please amend Fig. 5 as shown in red on the attached Annotated Sheet Showing Changes.

Attachments: Replacement Sheet
Annotated Sheet Showing Changes

REMARKS

The purpose of the foregoing amendment is to more clearly define the present invention, and particularly to more sharply distinguish it from the references cited in the International Search Report and Written Opinion, both dated October 18, 2005, namely Toth et al US Patent 6,480,141 and Baath US Patent 6,244,743.

Thus, Toth et al US Patent relates to a method and system for using microwave radiation to detect contraband hidden inside of a non-metallic container, such as a pneumatic vehicle tire. The method is based on the attenuation, retardation, time delay or phase shift of microwave radiation passed through the container past the contraband.

Baath relates to a method and apparatus for determining the molecular density and temperature of a substance within a closed process room involving a melting or combustion operation.

Thus, Claim 1, as now amended, is drawn to a method of detecting a predetermined condition of a panel itself, not in a space enclosed by the panel. The method comprises transmitting a cyclically-repeating energy wave through a transmission channel in the panel consisting solely of the material of the panel, i.e., not in the space enclosed by the panel. The transit time of the energy wave through the transmission channel is measured and utilized to detect the predetermined condition of the panel.

Claim 1, particularly as now amended, thus clearly distinguishes over both of the references, relating to detecting or measuring a condition in a space within a container or within a room. It is submitted, therefore, that Claim 1 is clearly allowable over the cited references.

Claims 2-10 all depend from Claim 1, and are therefore submitted to be allowable with that claim for the same reasons as discussed above, apart from the further features added in the respective dependent claims.

Claim 11 is drawn as an apparatus for detecting a predetermined condition of a panel. This claim has been amended similar to the amendments discussed above made in method Claim 1, and is therefore also submitted to be allowable for the same reasons as discussed above with respect to method Claim 1.

The remaining Claims 12–20 all depend from Claim 11, and are therefore submitted to be allowable with that claim for the same reasons, apart from the further features set forth in the respective dependent claims.

The specification has been amended merely to conform the introductory portion to the language now used in method Claim 1.

With respect to the drawings, Fig. 5 has been corrected to show the transmitter 51 and receiver 52 defining a transmission channel within each floor tile 50, as being in the same floor tile.

In view of the foregoing, it is believed this application is now in condition for allowance, and an early Notice of Allowance is respectfully requested.

Respectfully Submitted,

A handwritten signature in cursive script, reading "Martin D. Moynihan".

Martin D. Moynihan
Registration No. 40,338

August 9, 2006

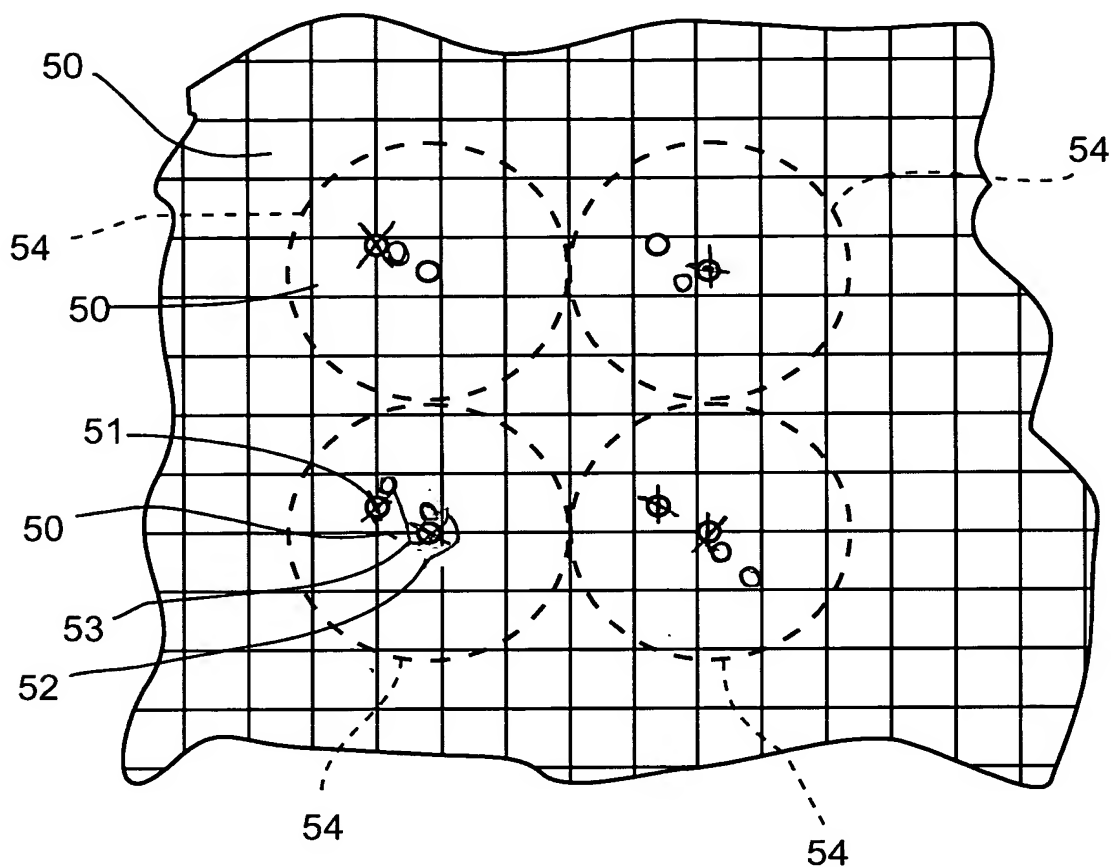


Fig. 5

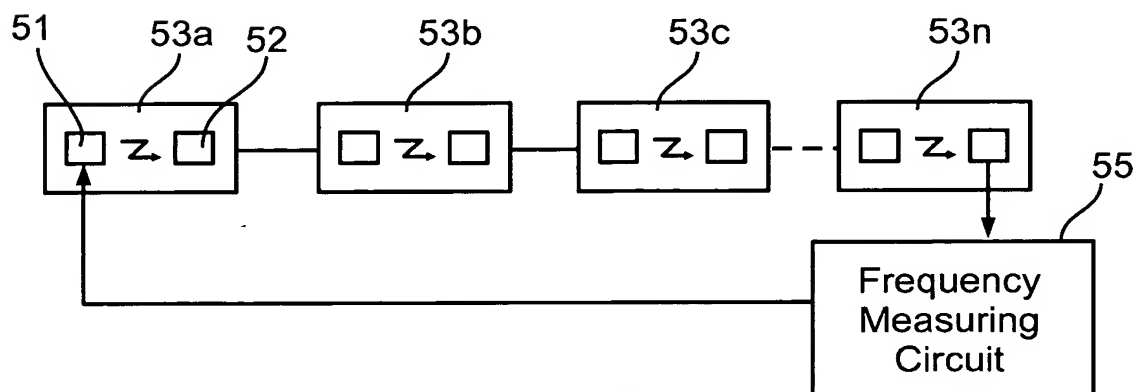


Fig. 6